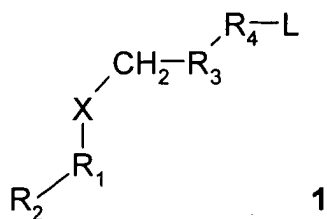
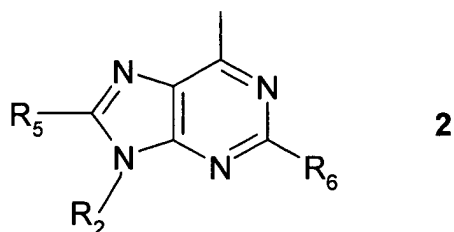


Amendments to the Claims

1. (Cancelled)
2. (Currently amended) A compound of formula 1



wherein R₁-R₂ is a radical of formula 2



wherein R₂ is hydrogen, alkyl of 1 to 10 carbon atoms, or a saccharide moiety;

R₅ is hydrogen, halogen, trifluoromethyl, or hydroxy; and

R₆ is hydrogen, hydroxy or unsubstituted or substituted amino;

and tautomeric forms thereof;

X is oxygen or sulfur;

R₃ is triazolylene, tetrazolylene, isoxazolylene, thienylene, isoxazolidinylene, or alkynylene, wherein a double bond or the triple bond, respectively, is connected to CH₂;

R₄ is an optionally substituted straight or branched chain alkylene group with 1 to 300 carbon atoms, wherein optionally

- (a) one or more carbon atoms are replaced by oxygen
- (b) one or more carbon atoms are replaced by nitrogen carrying a hydrogen atom, and an adjacent carbon atom is substituted by oxo, representing an amide function –NH-CO-;
- (c) one or more carbon atoms are replaced by oxygen, and an adjacent carbon atom is substituted by oxo, representing an ester function –O-CO-;

(d) the bond between two adjacent carbon atoms is a double or a triple bond, representing a function $-\text{CH}=\text{CH}-$ or $-\text{C}\equiv\text{C}-$;

(e) one or more carbon atoms are replaced by a phenylene, a saturated or unsaturated cycloalkylene, a saturated or unsaturated bicycloalkylene, a bridging heteroaromatic or a bridging saturated or unsaturated heterocyclyl group; and/or

(f) two adjacent carbon atoms are replaced by a disulfide linkage $-\text{S}-\text{S}-$; and

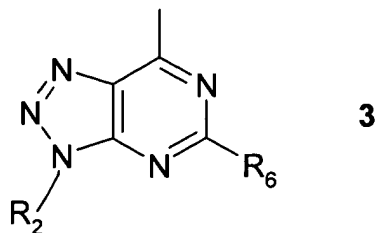
L is one or a plurality of same or different labels selected from a spectroscopic probe selected from a fluorophore and a chromophore, a moiety ~~which is comprising~~ one part of a specific binding pair selected from biotin, ~~avidin, avidin and streptavidin, an amine, an activated carboxy group, an azide and a propionic acid derivative~~, a moiety which is capable of generating hydroxyl radicals upon exposure to H_2O_2 and ascorbate, a moiety which is capable of generating reactive radicals upon irradiation with light, a moiety covalently attached to a solid support, a nucleic acid moiety or a derivative thereof capable of undergoing base-pairing with its complementary strand, a lipid or other hydrophobic moiety with membrane-inserting properties, a bond connecting R_4 to R_1 forming a cyclic substrate, and a further group $-\text{R}_3-\text{CH}_2-\text{X}-\text{R}_1-\text{R}_2$.

3. (Cancelled)

4. (Previously presented) The compound of formula 1 according to claim 2, wherein the saccharide moiety R_2 is a $\beta\text{-D-2'}$ -deoxyribosyl, or a $\beta\text{-D-2'}$ -deoxyribosyl being incorporated into a single stranded oligodeoxyribonucleotide having a length of 2 to 99 nucleotides, wherein the radical of formula 2 occupies any position within the oligonucleotide sequence.

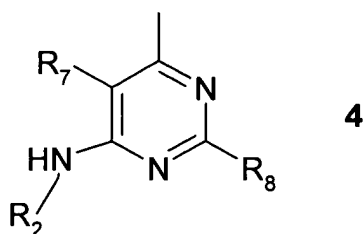
5. (Previously presented) The compound of formula 1 according to claim 2, wherein R_2 is hydrogen, R_5 is hydrogen, R_6 is unsubstituted amino, and X is oxygen.

6. (Withdrawn) The compound of formula 1 according to claim 1, wherein R_1-R_2 is a radical of formula 3



wherein R_2 is hydrogen, alkyl of 1 to 10 carbon atoms, or a saccharide moiety; and R_6 is hydrogen, hydroxy or unsubstituted or substituted amino; and tautomeric forms thereof.

7. (Withdrawn) The compound of formula 1 according to claim 1, wherein R_1 - R_2 is a radical of formula 4



wherein R_2 is hydrogen, alkyl of 1 to 10 carbon atoms, or a saccharide moiety; and R_7 and R_8 are both independently of one another hydrogen, halogen, lower alkyl with 1 to 4 carbon atoms, amino, or nitro.

8. (Previously presented) The compound of formula 1 according to claim 2, wherein R_3 is triazolylene, tetrazolylene, isoxazolylene, thienylene, or isoxazolidinylene.

9. (Previously presented) The compound of formula 1 according to claim 8 wherein R_3 is triazolylene.

10. (Previously presented) The compound of formula 1 according to claim 8 wherein R_3 is tetrazolylene.

11. (Previously presented) The compound of formula 1 according to claim 8 wherein R₃ is isoxazolylenes.
12. (Previously presented) The compound of formula 1 according to claim 8 wherein R₃ is thienylene.
13. (Previously presented) The compound of formula 1 according to claim 8 wherein R₃ is isoxazolidinylene.
14. (Previously presented) The compound of formula 1 according to claim 2, wherein R₃ is 1-alkynylene.
15. (Previously presented) The compound of formula 1 according to claim 2, wherein R₄ is a straight chain alkylene group with 2 to 25 carbon atoms, a straight chain polyethylene glycol group with 4 to 100 ethyleneoxy units, or a straight chain alkylene group with 2 to 25 carbon atoms wherein two or more carbon atoms are replaced by an amide function –NH–CO–, optionally attached to the group R₃ by a –CH=CH– or –C≡C– group.
16. (Previously presented) The compound of formula 1 according to claim 2, wherein R₄ is a branched chain alkylene group comprising a polyethylene glycol group of 3 to 6 ethylene glycol units and one or more alkylene groups wherein carbon atoms are replaced by amide bonds, and further carrying substituted amino and hydroxy functions.
17. (Previously presented) The compound of formula 1 according to claim 2, wherein R₄ is a branched chain alkylene group, wherein amine, carboxamide and ether functions replace carbon atoms of the alkylene group.
18. (Previously presented) The compound of formula 1 according to claim 2, wherein L is a further group –R₃–CH₂–X–R₁–R₂.

19. (Previously presented) The compound of formula 1 according to claim 2, wherein R_4 is a straight chain alkylene group of 10 to 40 carbon atoms wherein 3 to 12 carbon atoms are replaced by oxygen, one or two carbon atoms are replaced by 1,4-triazolidene units, and optionally one carbon atom is replaced by a 1,4-phenylene unit.

20. (Previously presented) The compound of formula 1 according to claim 2, wherein R_4 is a straight chain alkylene group of 10 to 40 carbon atoms optionally substituted by oxo wherein 3 to 12 carbon atoms are replaced by oxygen and one or two carbon atoms are replaced by nitrogen.

21. (Previously presented) The compound of formula 1 according to claim 2, wherein R_4 is a straight chain alkylene group of 6 to 40 carbon atoms wherein 2 to 12 carbon atoms are replaced by oxygen and one or two bonds between two adjacent carbon atoms is a double bond.

22. (Previously presented) The compound of formula 1 according to claim 2, wherein R_6 is amino and L is a bond connecting R_4 to R_6 .

23. (Previously presented) The compound of formula 1 according to claim 2, wherein L is methotrexate.

24. (Previously presented) The compound of formula 1 according to claim 2, wherein L is a plurality of same or different labels.

25. (Previously presented) The compound of formula 1 according to claim 24, wherein L is two different labels.

26. (Cancelled)

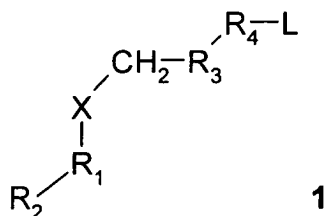
27. (Previously presented) A method for the synthesis of a compound of the formula 1 according to claim 2, which comprises reacting a compound of the formula $R_2-R_1-X-CH_2-R_3-R_4'$, wherein R_1 , R_2 , R_3 and X have the meaning as defined in claim 2 and R_4' is a polyfunctional

residue having two or more reactive nucleophilic or electrophilic groups, with a suitable reagent introducing one or more labels L.

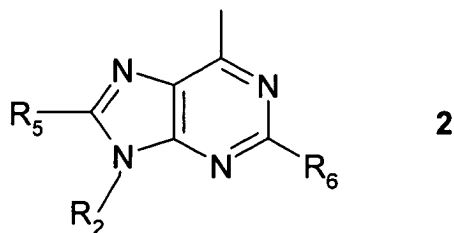
28. (Currently amended) A method according to claim 27 wherein the reactive nucleophilic or electrophilic groups in R_4' are protected by separately removable protection groups, the method comprising the further steps of

- (a) separately deprotecting one protected reactive nucleophilic or electrophilic group and attaching a label to it or extending the ~~linker~~ polyfunctional residue R_4' ,
- (b) separately deprotecting another protected reactive nucleophilic or electrophilic group and attaching a label to it or extending the ~~linker~~ polyfunctional residue R_4' , and
- (c) optionally repeating the steps of deprotection and label attachment or linker polyfunctional residue extension until all depending on the number of protected reactive nucleophilic and electrophilic groups are removed.

29. (Previously presented) A compound of the formula 1



wherein R_1 - R_2 is a radical of formula 2



wherein R_2 is hydrogen, R_5 is hydrogen and R_6 is unsubstituted amino;

X is oxygen;

R_3 is triazolylene, tetrazolylene, isoxazolylene, thienylene, isoxazolidinylene or alkynylene, wherein a double bond or the triple bond, respectively, is connected to CH_2 ;

R₄ is an optionally substituted straight or branched chain alkylene group with 1 to 300 carbon atoms, wherein optionally

- (a) one or more carbon atoms are replaced by oxygen
- (b) one or more carbon atoms are replaced by nitrogen carrying a hydrogen atom, and an adjacent carbon atom is substituted by oxo, representing an amide function –NH-CO-;
- (c) one or more carbon atoms are replaced by oxygen, and an adjacent carbon atom is substituted by oxo, representing an ester function –O-CO-;
- (d) the bond between two adjacent carbon atoms is a double or a triple bond, representing a function –CH=CH- or –C≡C-;
- (e) one or more carbon atoms are replaced by a phenylene, a saturated or unsaturated cycloalkylene, a saturated or unsaturated bicycloalkylene, a bridging heteroaromatic or a bridging saturated or unsaturated heterocyclyl group; and/or
- (f) two adjacent carbon atoms are replaced by a disulfide linkage -S-S-; and

L is amino or azido.

30. (Previously presented) A compound according to claim 29 wherein

R₄ is a straight chain alkylene group of 10 to 40 carbon atoms optionally substituted by oxo wherein up to 12 carbon atoms are replaced by oxygen and zero, one or two carbon atoms are replaced by nitrogen.

31. (Previously presented) A method for detecting a protein of interest, which comprises contacting an AGT fusion protein comprising the protein of interest with an AGT substrate carrying a label, and detecting the AGT fusion protein using the label in a system designed for recognising the label, and wherein the AGT substrate carrying the label is a compound of formula 1 according to claim 2.